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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,608	12/02/2003	Hiroynki Kometani	380-45	3708
23117 7590 12/30/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
SERGENT, RABON A				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
12/30/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/724,608

Applicant(s)

KOMETANI ET AL.

Examiner

Rabon Sergeant

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20, 23, 24 and 26-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20, 23, 24 and 26-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/973,747.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 10, 2008 has been entered.
2. Claims 29-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language within claims 29-32 is vague and confusing to such an extent that no meaningful limitation can be ascribed to them.

Specifically, it is unclear if applicants are claiming that the pot life is within a range of from at least 760 seconds to a time that the viscosity reaches 1000 mPa's and/or if applicants are claiming that the pot life ends at 1000 mPa's.

Furthermore, the language, "a rapid increase in viscosity of at least 808 seconds at least 816 seconds ...", renders the claims indefinite for the following reasons. Firstly, the word, "rapid" is subjective. Secondly, it is unclear how to correlate the language pertaining to viscosity and the time. For example, it is not clear that the language equates to specifying that it takes at least 808 seconds for the viscosity to reach 2000 mPa's.

Lastly, since viscosities are recognized as being highly temperature dependent, the claiming of viscosities absent a temperature condition renders the claims indefinite, because the values are virtually meaningless in terms of further limiting the claims.

3. Claims 29-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Adequate support has not been provided for the full scope of the subject matter of claims 29-32. Applicants have stated that support stems from Table 4; however, the results set forth within Table 4 are based upon compositions that are of a far more narrow scope than those set forth within the claims. For example, all of the results within Table 4 are based upon a MDI prepolymer of a specific composition set forth within Table 3. Furthermore, only a limited number of catalyst-acid species in specific amounts are set forth within Table 4; however, the claims encompass a much larger combination of catalyst acid combinations. Furthermore, given that a limited number of compositions are set forth within Table 4 and that only a single set of data points is set forth for each composition, it has not been established that applicants were in possession of the claimed time ranges. There is simply insufficient evidence on the record to establish that applicants were in possession of the full scope of the claims at the time of invention.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 20, 23, 24, and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markusch et al. ('892) in view of Hannah et al. ('659) and Hagio et al. ('104).

Markusch et al. disclose polyurethane compositions, suitable for use as two- or multiple component compositions, wherein the compositions are produced by reacting a polyisocyanate, including aromatic polyisocyanate prepolymers, with a polyether polyol, wherein a suitable catalyst is disclosed as being acid blocked 1,8-diazabicyclo (5,4,0) undecene-7. See abstract; column 2, lines 23+; column 3, lines 51+; column 4, lines 1-33; column 5, lines 23+; column 6; column 9, lines 11-15 and 58+; and column 10, lines 1 and 2.

6. Though Markusch et al. fail to provide additional disclosure concerning the selection of the blocking-acid species, Hannah et al. and Hagio et al. disclose suitable acids for the production of such acid-blocked catalysts that are considered to encompass those claimed by applicants. See column 4, line 65 through column 5, line 27 within Hannah et al. See column 3, lines 14-19 within Hagio et al. Accordingly, the position is taken that it would have been obvious to use virtually any unsaturated acid that falls within the teachings of the secondary reference to block the catalyst of Markusch et al.

7. Applicants' response of December 10, 2008 has been considered; and, in response, the prior art rejection has been modified. Firstly, despite applicants' arguments, the position is taken, given the description of the reactants and utilities, that the use of the name, sealant, versus the name, adhesive, is insufficient to distinguish the claims from the prior art. The fact remains that compositions of the type claimed inherently function as adhesives and adhesives of the type disclosed inherently function as sealants. Secondly, though Hagio et al. has been removed as the primary reference due to the instant claiming of the polyether component, the examiner maintains that polyisocyanates, as understood within the art, encompass blocked isocyanates. As evidence of this, applicants' attention is directed to column 2, lines 33-35 of U.S. Patent 5,494,994, wherein it is stated, "Suitable polyisocyanates include blocked polyisocyanates ... and/or polyisocyanates which are free from blocking agents." As previously set forth, even if blocking agents are excluded, it is not seen that such an exclusion serves to overcome the prior art that utilizes blocked isocyanates, since one would reasonably expect from the teachings of the references and the general state of the art that the disclosed catalysts would catalyze the reaction of virtually any polyisocyanate-polyol reactant mixture. Secondly, the examiner has again considered applicants' examples; however, it is not seen that applicants have provided showings commensurate in scope with the claims to rebut the *prima facie* case of obviousness. Despite applicants' remarks and amendments, applicants' claims and examples are not commensurate in scope in terms of reactants, catalyst species, acid species, quantities of reactants, quantities of catalyst, and ratios of catalyst to acid. It has been held that evidence of unexpected results, must pertain to the full extent of the subject matter being claimed. *In re Ackermann*, 170 USPQ 340; *In re Chupp*, 2 USPQ2d 1437; *In re Murch*, 175 USPQ 89. Accordingly, to overcome a *prima*

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facie case of obviousness, the claims must be commensurate in scope with any showing of unexpected results. *In re Greenfield*, 197 USPQ 227. Furthermore, it has been held that a limited showing of criticality is insufficient to support a broadly claimed range. *In re Lemin*, 161 USPQ 288; *In re Kulling*, 14 USPQ2d 1056. For example, it is noted that applicants' results in Table 4 are derived from a specific prepolymer and polyol composition set forth within Table 3; however, applicants' claims, as well as the prior art, are not so limited. Since applicants' results are directly related to reactivity profiles, it stands to reason that applicants' results would likely not be the same for a different prepolymer having a different reactivity or a different polyether having hydroxyl groups of a different reactivity. Accordingly, applicants' results fail to meet the aforementioned requirements. In summation, the position is taken that the evidence of obviousness outweighs the evidence of non-obviousness.

Any inquiry concerning this communication should be directed to Rabon Sergent at telephone number (571) 272-1079.

/Rabon Sergent/
Primary Examiner, Art Unit 1796

R. Sergent
December 21, 2008